

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/S21,741 10/520,741  
Source: PF  
Date Processed by STIC: 4-14-06

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 04/14/2006

PATENT APPLICATION: US/10/520,741

TIME: 09:57:15

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\04142006\J520741.raw

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3 <110> APPLICANT: Sema ApS
4     Albrechtsen, Morten
5     Christensen, Claus
6     Lukanidin, Eugene
7     Olesen, Ole
9 <120> TITLE OF INVENTION: Use of compounds capable of inhibiting the proteolytic
processing of
10     semaphorins for prevention, treatment, diagnosis and prognosis of an invasive
11     disease
13 <130> FILE REFERENCE: P682 PC00
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/520,741
C--> 16 <141> CURRENT FILING DATE: 2005-01-11
18 <160> NUMBER OF SEQ ID NOS: 30
20 <170> SOFTWARE: PatentIn version 3.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 775
24 <212> TYPE: PRT
25 <213> ORGANISM: Mus sp.
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33 Leu Glu Leu Trp Thr Pro Gly His Ser Ala Asn Pro Ser Tyr Pro Arg
34      20      25      30
37 Leu Arg Leu Ser His Lys Glu Leu Leu Glu Leu Asn Arg Thr Ser Ile
38      35      40      45
41 Phe Gln Ser Pro Leu Gly Phe Leu Asp Leu His Thr Met Leu Leu Asp
42      50      55      60
45 Glu Tyr Gln Glu Arg Leu Phe Val Gly Gly Arg Asp Leu Val Tyr Ser
46 65      70      75      80
49 Leu Asn Leu Glu Arg Val Ser Asp Gly Tyr Arg Glu Ile Tyr Trp Pro
50      85      90      95
53 Ser Thr Ala Val Lys Val Glu Glu Cys Ile Met Lys Gly Lys Asp Ala
54      100     105     110
57 Asn Glu Cys Ala Asn Tyr Ile Arg Val Leu His His Tyr Asn Arg Thr
58      115     120     125
61 His Leu Leu Thr Cys Ala Thr Gly Ala Phe Asp Pro His Cys Ala Phe
62      130     135     140
65 Ile Arg Val Gly His His Ser Glu Glu Pro Leu Phe His Leu Glu Ser
66 145     150     155     160
69 His Arg Ser Glu Arg Gly Arg Gly Arg Cys Pro Phe Asp Pro Asn Ser
70      165     170     175
73 Ser Phe Val Ser Thr Leu Val Gly Asn Glu Leu Phe Ala Gly Leu Tyr
74      180     185     190
77 Ser Asp Tyr Trp Gly Arg Asp Ser Ala Ile Phe Arg Ser Met Gly Lys

```

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78          195          200          205
81 Leu Gly His Ile Arg Thr Glu His Asp Asp Glu Arg Leu Leu Lys Glu
82          210          215          220
85 Pro Lys Phe Val Gly Ser Tyr Met Ile Pro Asp Asn Glu Asp Arg Asp
86 225          230          235          240
89 Asp Asn Lys Met Tyr Phe Phe Phe Thr Glu Lys Ala Leu Glu Ala Glu
90          245          250          255
93 Asn Asn Ala His Thr Ile Tyr Thr Arg Val Gly Arg Leu Cys Val Asn
94          260          265          270
97 Asp Met Gly Gly Gln Arg Ile Leu Val Asn Lys Trp Ser Thr Phe Leu
98          275          280          285
101 Lys Ala Arg Leu Val Cys Ser Val Pro Gly Met Asn Gly Ile Asp Thr
102          290          295          300
105 Tyr Phe Asp Glu Leu Glu Asp Val Phe Leu Leu Pro Thr Arg Asp Pro
106 305          310          315          320
109 Lys Asn Pro Val Ile Phe Gly Leu Phe Asn Thr Thr Ser Asn Ile Phe
110          325          330          335
113 Arg Gly His Ala Val Cys Val Tyr His Met Ser Ser Ile Arg Glu Ala
114          340          345          350
117 Phe Asn Gly Pro Tyr Ala His Lys Glu Gly Pro Glu Tyr His Trp Ser
118          355          360          365
121 Leu Tyr Glu Gly Lys Val Pro Tyr Pro Arg Pro Gly Ser Cys Ala Ser
122          370          375          380
125 Lys Val Asn Gly Gly Lys Tyr Gly Thr Thr Lys Asp Tyr Pro Asp Asp
126 385          390          395          400
129 Ala Ile Arg Phe Ala Arg Ile Asp Pro Leu Met Tyr Gln Pro Ile Lys
130          405          410          415
133 Pro Val His Lys Lys Pro Ile Leu Val Lys Thr Asp Gly Lys Tyr Asn
134          420          425          430
137 Leu Arg Gln Leu Ala Val Asp Arg Val Glu Ala Glu Asp Gly Gln Tyr
138          435          440          445
141 Asp Val Leu Phe Ile Gly Thr Asp Thr Gly Ile Val Leu Lys Val Ile
142          450          455          460
145 Thr Ile Tyr Asn Gln Glu Thr Glu Trp Met Glu Glu Val Ile Leu Glu
146 465          470          475          480
149 Glu Leu Gln Ile Phe Lys Asp Pro Ala Pro Ile Ile Ser Met Glu Ile
150          485          490          495
153 Ser Ser Lys Arg Gln Gln Leu Tyr Ile Gly Ser Ala Ser Ala Val Ala
154          500          505          510
157 Gln Val Arg Phe His His Cys Asp Met Tyr Gly Ser Ala Cys Ala Asp
158          515          520          525
161 Cys Cys Leu Ala Arg Asp Pro Tyr Cys Ala Trp Asp Gly Ile Ser Cys
162          530          535          540
165 Ser Arg Tyr Tyr Pro Thr Gly Ala His Ala Lys Arg Arg Phe Arg Arg
166 545          550          555          560
169 Gln Asp Val Arg His Gly Asn Ala Ala Gln Gln Cys Phe Gly Gln Gln
170          565          570          575
173 Phe Val Gly Asp Ala Leu Asp Arg Thr Glu Glu Arg Leu Ala Tyr Gly
174          580          585          590

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177 Ile Glu Ser Asn Ser Thr Leu Leu Glu Cys Thr Pro Arg Ser Leu Gln
178           595           600           605
181 Ala Lys Val Ile Trp Phe Tyr Gln Lys Gly Arg Asp Val Arg Lys Glu
182           610           615           620
185 Glu Val Lys Thr Asp Asp Arg Val Val Lys Met Asp Leu Gly Leu Leu
186 625           630           635           640
189 Phe Leu Arg Val Arg Lys Ser Asp Ala Gly Thr Tyr Phe Cys Gln Thr
190           645           650           655
193 Val Glu His Asn Phe Val His Thr Val Arg Lys Ile Thr Leu Glu Val
194           660           665           670
197 Val Glu Glu His Lys Val Glu Gly Met Phe His Lys Asp His Glu Glu
198           675           680           685
201 Glu Arg His His Lys Met Pro Cys Pro Pro Leu Ser Gly Met Ser Gln
202           690           695           700
205 Gly Thr Lys Pro Trp Tyr Lys Glu Phe Leu Gln Leu Ile Gly Tyr Ser
206 705           710           715           720
209 Asn Phe Gln Arg Val Glu Glu Tyr Cys Glu Lys Val Trp Cys Thr Asp
210           725           730           735
213 Lys Lys Arg Lys Lys Leu Lys Met Ser Pro Ser Lys Trp Lys Tyr Ala
214           740           745           750
217 Asn Pro Gln Glu Lys Arg Leu Arg Ser Lys Ala Glu His Phe Arg Leu
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221 Pro Arg His Thr Leu Leu Ser
222           770           775
225 <210> SEQ ID NO: 2
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227 <212> TYPE: PRT
228 <213> ORGANISM: Mus sp.
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233 1           5           10           15
236 Leu Glu Leu Trp Thr Gly Gly His Thr Ala Asp Thr Thr His Pro Arg
237           20           25           30
240 Leu Arg Leu Ser His Lys Glu Leu Leu Asn Leu Asn Arg Thr Ser Ile
241           35           40           45
244 Phe His Ser Pro Phe Gly Phe Leu Asp Leu His Thr Met Leu Leu Asp
245           50           55           60
248 Glu Tyr Gln Glu Arg Leu Phe Val Gly Gly Arg Asp Leu Val Tyr Ser
249 65           70           75           80
252 Leu Ser Leu Glu Arg Ile Ser Asp Gly Tyr Lys Glu Ile His Trp Pro
253           85           90           95
256 Ser Thr Ala Leu Lys Met Glu Glu Cys Ile Met Lys Gly Lys Asp Ala
257           100           105           110
260 Gly Glu Cys Ala Asn Tyr Val Arg Val Leu His His Tyr Asn Arg Thr
261           115           120           125
264 His Leu Leu Thr Cys Gly Thr Gly Ala Phe Asp Pro Val Cys Ala Phe
265           130           135           140
268 Ile Arg Val Gly Tyr His Leu Glu Asp Pro Leu Phe His Leu Glu Ser
269 145           150           155           160

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272 Pro Arg Ser Glu Arg Gly Arg Gly Arg Cys Pro Phe Asp Pro Ser Ser
273          165          170          175
276 Ser Phe Ile Ser Thr Leu Ile Gly Ser Glu Leu Phe Ala Gly Leu Tyr
277          180          185          190
280 Ser Asp Tyr Trp Ser Arg Asp Ala Ala Ile Phe Arg Ser Met Gly Arg
281          195          200          205
284 Leu Ala His Ile Arg Thr Glu His Asp Asp Glu Arg Leu Leu Lys Glu
285          210          215          220
288 Pro Lys Phe Val Gly Ser Tyr Met Ile Pro Asp Asn Glu Asp Arg Asp
289 225          230          235          240
292 Asp Asn Lys Val Tyr Phe Phe Phe Thr Glu Lys Ala Leu Glu Ala Glu
293          245          250          255
296 Asn Asn Ala His Ala Ile Tyr Thr Arg Val Gly Arg Leu Cys Val Asn
297          260          265          270
300 Asp Val Gly Gly Gln Arg Ile Leu Val Asn Lys Trp Ser Thr Phe Leu
301          275          280          285
304 Lys Ala Arg Leu Val Cys Ser Val Pro Gly Met Asn Gly Ile Asp Thr
305          290          295          300
308 Tyr Phe Asp Glu Leu Glu Asp Val Phe Leu Leu Pro Thr Arg Asp His
309 305          310          315          320
312 Lys Asn Pro Val Ile Phe Gly Leu Phe Asn Thr Thr Ser Asn Ile Phe
313          325          330          335
316 Arg Gly His Ala Ile Cys Val Tyr His Met Ser Ser Ile Arg Ala Ala
317          340          345          350
320 Phe Asn Gly Pro Tyr Ala His Lys Glu Gly Pro Glu Tyr His Trp Ser
321          355          360          365
324 Val Tyr Glu Gly Lys Val Pro Tyr Pro Arg Pro Gly Ser Cys Ala Ser
325          370          375          380
328 Lys Val Asn Gly Gly Arg Tyr Gly Thr Thr Lys Asp Tyr Pro Asp Asp
329 385          390          395          400
332 Ala Ile Arg Phe Ala Arg Ser His Pro Leu Met Tyr Gln Ala Ile Lys
333          405          410          415
336 Pro Ala His Lys Lys Pro Ile Leu Val Lys Thr Asp Gly Lys Tyr Asn
337          420          425          430
340 Leu Lys Gln Ile Ala Val Asp Arg Val Glu Ala Glu Asp Gly Gln Tyr
341          435          440          445
344 Asp Val Leu Phe Ile Gly Thr Asp Asn Gly Ile Val Leu Lys Val Ile
345          450          455          460
348 Thr Ile Tyr Asn Gln Glu Met Glu Ser Met Glu Glu Val Ile Leu Glu
349 465          470          475          480
352 Glu Leu Gln Ile Phe Lys Asp Pro Val Pro Ile Ile Ser Met Glu Ile
353          485          490          495
356 Ser Ser Lys Arg Gln Gln Leu Tyr Ile Gly Ser Ala Ser Ala Val Ala
357          500          505          510
360 Gln Val Arg Phe His His Cys Asp Met Tyr Gly Ser Ala Cys Ala Asp
361          515          520          525
364 Cys Cys Leu Ala Arg Asp Pro Tyr Cys Ala Trp Asp Gly Ile Ser Cys
365          530          535          540
368 Ser Arg Tyr Tyr Pro Thr Gly Thr His Ala Lys Arg Arg Phe Arg Arg

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Input Set : A:\PTO.RJ.txt

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```

369 545          550          555          560
372 Gln Asp Val Arg His Gly Asn Ala Ala Gln Gln Cys Phe Gly Gln Gln
373          565          570          575
376 Phe Val Gly Asp Ala Leu Asp Lys Thr Glu Glu His Leu Ala Tyr Gly
377          580          585          590
380 Ile Glu Asn Asn Ser Thr Leu Leu Glu Cys Thr Pro Arg Ser Leu Gln
381          595          600          605
384 Ala Lys Val Ile Trp Phe Val Gln Lys Gly Arg Glu Thr Arg Lys Glu
385          610          615          620
388 Glu Val Lys Thr Asp Asp Arg Val Val Lys Met Asp Leu Gly Leu Leu
389 625          630          635          640
392 Phe Leu Arg Leu His Lys Ser Asp Ala Gly Thr Tyr Phe Cys Gln Thr
393          645          650          655
396 Val Glu His Ser Phe Val His Thr Val Arg Lys Ile Thr Leu Glu Val
397          660          665          670
400 Val Glu Glu Glu Lys Val Glu Asp Met Phe Asn Lys Asp Asp Glu Glu
401          675          680          685
404 Asp Arg His His Arg Met Pro Cys Pro Ala Gln Ser Ser Ile Ser Gln
405          690          695          700
408 Gly Ala Lys Pro Trp Tyr Lys Glu Phe Leu Gln Leu Ile Gly Tyr Ser
409 705          710          715          720
412 Asn Phe Gln Arg Val Glu Glu Tyr Cys Glu Lys Val Trp Cys Thr Asp
413          725          730          735
416 Arg Lys Arg Lys Lys Leu Lys Met Ser Pro Ser Lys Trp Lys Tyr Ala
417          740          745          750
420 Asn Pro Gln Glu Lys Lys Leu Arg Ser Lys Pro Glu His Tyr Arg Leu
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424 Pro Arg His Thr Leu Asp Ser
425          770          775
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440          20          25          30
443 Leu Arg Leu Ser His Lys Glu Leu Leu Glu Leu Asn Arg Thr Ser Ile
444          35          40          45
447 Phe Gln Ser Pro Leu Gly Phe Leu Asp Leu His Thr Met Leu Leu Asp
448          50          55          60
451 Glu Tyr Gln Glu Arg Leu Phe Val Gly Gly Arg Asp Leu Val Tyr Ser
452 65          70          75          80
455 Leu Asn Leu Glu Arg Val Ser Asp Gly Tyr Arg Glu Ile Tyr Trp Pro
456          85          90          95
459 Ser Thr Ala Val Lys Val Glu Glu Cys Ile Met Lys Gly Lys Asp Ala
460          100          105          110
463 Asn Glu Cys Ala Asn Tyr Ile Arg Val Leu His His Tyr Asn Arg Thr

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/520,741

DATE: 04/14/2006

TIME: 09:57:16

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\04142006\J520741.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application Number

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date